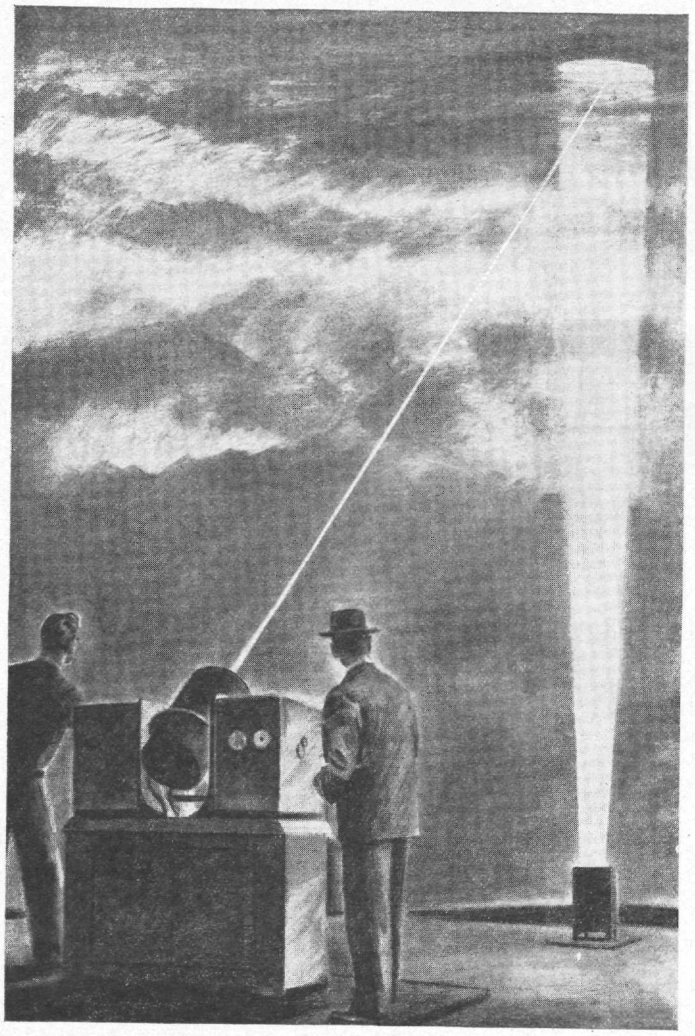
BITS OF STRING

Weathering Heights

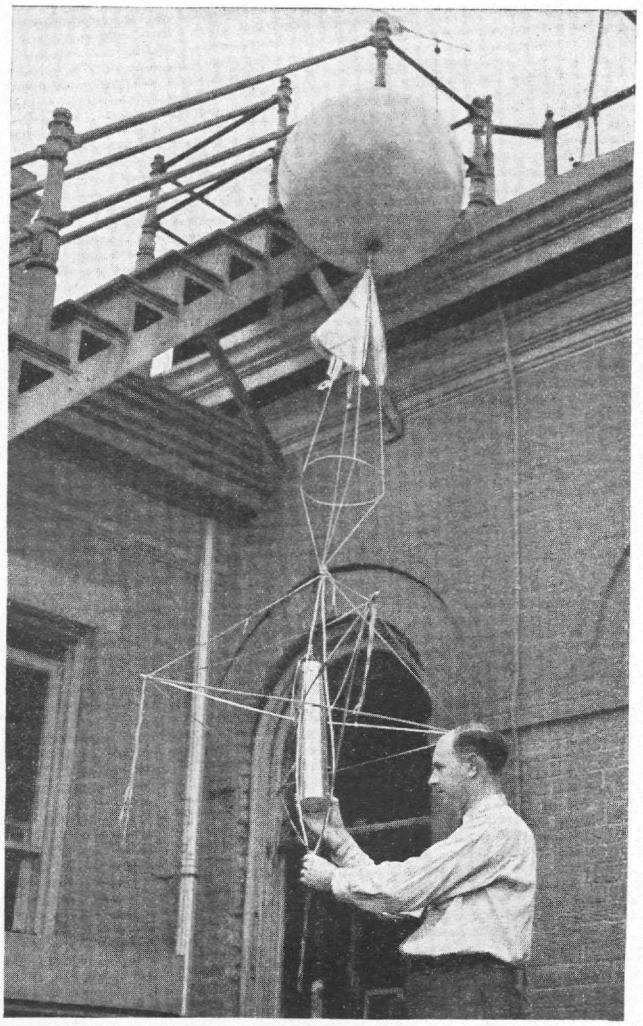
The elements are in for some rather amazing competition when the weather-predicting and combating devices now used by the military are released to the public. Rain, snow, and sleet will fall on cities prepared for the worst; ships will navigate in the densest fog; planes will fly safely through clouds that load them with ice.

Glancing into the sky now is an eye many times larger than the human one, although constructed on the same principle. This is part of a General Electric device called the ceilometer which, by measuring the angle of light reflected from the clouds, enables engineers to get sky-information they never before had access to. With data on the heights and range of cloud banks, they are able to construct three-dimensional weather maps.



—*Courtesy General Electric.*

Light from the projector of a ceilometer is reflected from the clouds into a photoelectric eye. Cloud height and range can be determined in daylight with this instrument. Invisible light is used by the Armed Forces at night.



—*Courtesy General Electric.*

Similar to the radio sonde is the air sampler, which ascends 15 miles by balloon. After expanding to a diameter of about 15 feet, the balloon bursts and a sample of the air is parachuted to earth for weathermen.

Contributing considerably to this new era of weather predicting is another device for getting information from above the clouds—the radio sonde. The principles upon which the sonde operates cannot be divulged, but the regulation ones used by the Army and Weather Bureau operate this way: a radio transmitter and instruments for measuring temperature, humidity, and air pressure are sent up in a balloon to 50,000 or 70,000 feet. During its rise, at regular intervals the radio transmits instrument readings back to earth.

Because of these and others still secret, weather prediction is done with more accuracy and is done also farther in advance than ever was hoped

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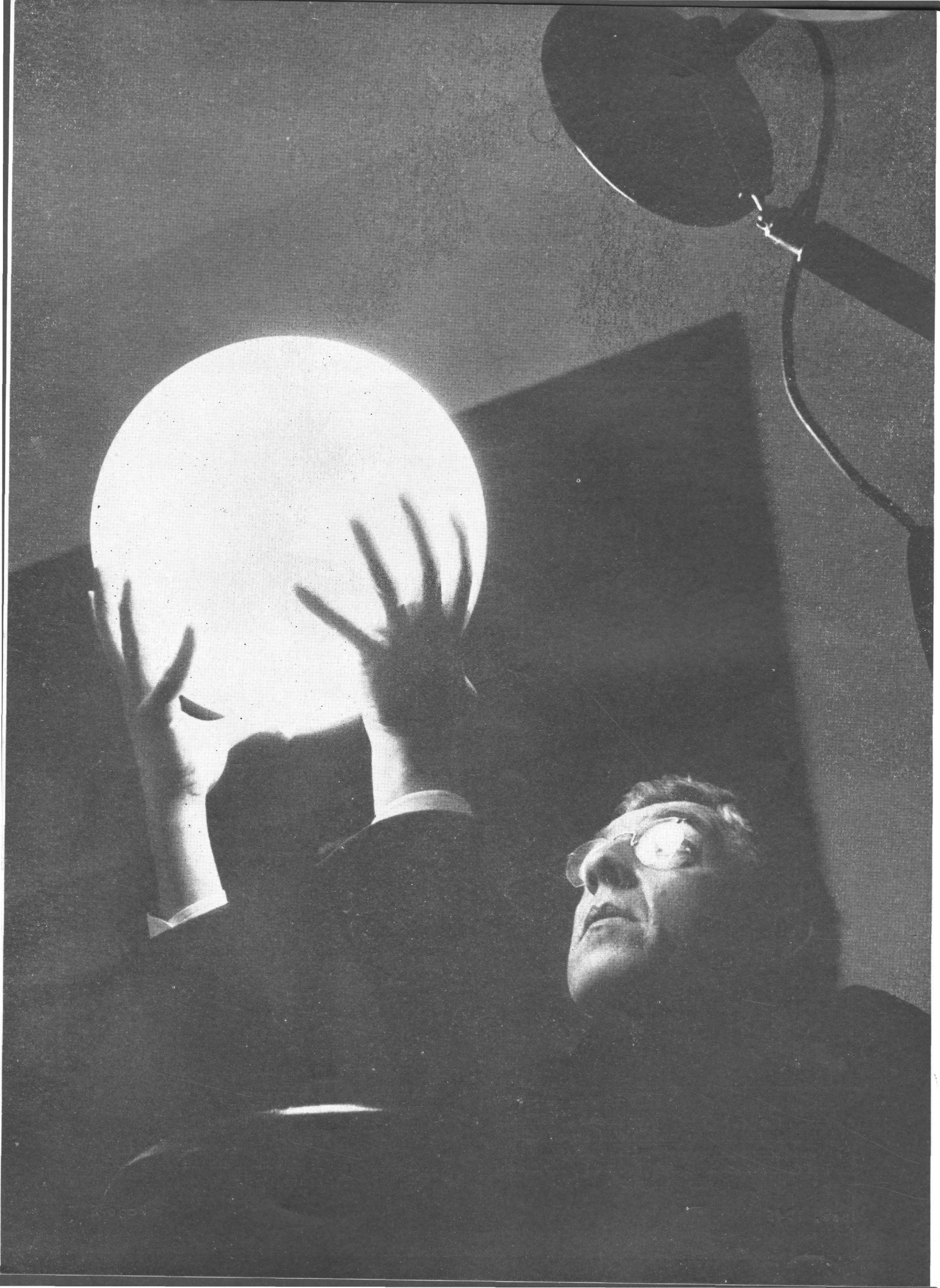

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(Continued from page 5)

for before the war. One of the advantages of the RAF and the USAAF over the Luftwaffe was the fact that since weather moves eastward, they knew what Germany's weather would be before it got there.

Also, the weather will be an important factor in commercial postwar aviation. Many companies are hiring their own weather observers because the business uses of weather information are becoming so important financially.

And then there was the girl who called her boy friend "Telephone," because she expected to get a ring from him!

* * *

Prof: "Money! That's all you boys think about nowadays. Why, do you know what I was getting when *I* got married?"

Back-row Joe: "Naw, and I'll bet you didn't either!"